REMARKS

The Office Action dated March 17, 2008 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-30 are currently pending in the application, including independent claims 1, 15, 29, and 30. More specifically, Applicants herein amended claims 1-29 and added new claim 30. It is respectfully submitted that the claim amendments and addition add no new subject matter to the present application and serve only to place the present application in better condition for examination by more particularly pointing out and distinctly claiming the subject matter that the Applicants regard as the invention. Entry of the amendments and addition is therefore respectfully urged. It is believed that all grounds for rejection in the Office Action have been addressed and that the present application is currently in condition for allowance in view of the claim amendments and addition, and the following arguments. Reconsideration and allowance of claims 1-30 are respectfully requested.

The Office Action continued to reject claims 1-29 under 35 U.S.C. 102(b) as being anticipated by an article by Ashwin Sampath, *et al.* entitled On Setting Reverse Link Target SIR in a CDMA System," Vehicular Technology Conference 1997, IEEE 47th, Phoenix, AZ, USA, May 4-7, 1997, pp 929-933, IEEE 0-7803-3659 (Sampath). As described in greater detail below, Sampath fails to disclose each and every limitation

recited in any of the pending claims. Therefore, reconsideration and allowance of claims 1-30 are respectfully requested.

Independent claim, from which claims 2-14 depend, relates to a method comprising determining a quality of a received coding block and storing samples of differences between a measured signal-to-interference ratio value and a target signal-to-interference ratio value. The target signal-to-interference ratio value is adjusted based on values of the samples of the differences between the measured signal-to-interference ratio value and the target signal-to-interference ratio value, and the quality of the received coding block. A transmit power control command is adjusted based on the adjusted target signal-to-interference ratio value to the user equipment.

Independent claim 15, from which claims 16-28 depend, relates to an apparatus that includes a determiner configured to determine a quality of a received coding block and a storage configured to store samples of differences between a measured signal-to-interference ratio value and a target signal-to-interference ratio value. An adjuster in the apparatus is configured to adjust the target signal-to-interference ratio value based on values of the samples of the differences between the measured signal-to-interference ratio value and the target signal-to-interference ratio value and the quality of the received coding block. A provider in the apparatus is configured to provide a transmit power control command based on the adjusted target signal-to-interference ratio value.

Independent claim 29 relates to an apparatus that includes determining means for determining a quality of a received coding block. Storing means in the apparatus store

samples of differences between a measured signal-to-interference ratio value and a target signal-to-interference ratio value. Adjusting means in the apparatus adjust the target signal-to-interference ratio value based on values of the samples of the differences between the measured signal-to-interference ratio value and the target signal-to-interference ratio value and the quality of the received coding block. Providing means in the apparatus provide a transmit power control command based on the adjusted target signal-to-interference ratio value.

As described in greater detail below, Sampath fails to disclose each and every limitation recited in any of the pending claims.

Sampath at the first column of page 930 at line 9-12 discloses a two step algorithm in the target SIR (E_b/I_o) is adjusted. In step 1, a Cyclic Redundancy Check (CRC) is used to check if the current frame (j) is in error. In step 2, the target SIR for the next frame (j+1) is adjusted depending on the results of the results of step 1 of the current frame. In particular, when frame error is detected, the target SIR is increased by $K*\Delta$ and when frame error is not detected, the target SIR is decreased by Δ, where Δ is a fixed constant step size and K is a constant that depends on the desired frame error rate (FER). See, for example, page 930 at column 1, lines 13-20. Thus, the disclosed process in Sampath adjusts the target SIR of a present frame solely whether frame error is detected in a single prior frame.

This understanding of Sampath is reinforced through the statements, for example, at page 930, column 1, lines 21-22 and 28 -30, and at page 931, column 1, lines 15-17,

that the target SIR adjustment method disclosed in Sampath is a Markov chain. In a Markov chain, all relevant data regarding a current event is assumed to be derivable from changes from the immediately preceding event. Therefore, occurrences from events prior to the immediately proceeding event are expressly ignored. For example, in the above described target SIR adjustment method, the target SIR of a current frame transmission is adjusted based upon an error, if any, detected in the prior frame. There is no consideration in the algorithm of any other frames, other than the immediately preceding frame.

In view of this discussion of Sampath, Applicants respectfully urge that this reference does not teach or suggest each and every limitation of claim 1. As an initial note, Sampath does not teach or suggest the limitation of "storing samples of differences between a measured signal-to-interference ratio value and a target signal-to-interference ratio value."

Regarding this limitation, the Office Action cites to Sampath at page 931, bottom two paragraphs o the second column. As an initial observation, Applicants note that this section refers to a statistical background discussion of the target SIR setting method described above, and not to modifications to that target SIR setting method. Instead, this text refers to predicted statistical results of changing the step size Δ on the expected SIR in FIG. 2 and the standard deviation of the SIR in FIG 3, based upon the statistical model presented in Sampath at page 930, column 2- page 931, column 1. There is no actual measurements disclosed in this cited text, and there is certainly no discussion of making

and storing multiple measures samples of actual SIR versus target SIR. These Figures 2 and 3 related to possible expected value for a single SIR based upon the different possible values for the step size Δ.

Furthermore, as described above, Sampath teaches using only the last frame, or at best a sample, not the multiple samples recited in the present application. Again, Applicants urge that Sampath does not make or making and storing multiple measures samples of actual SIR versus target SIR.

Furthermore, there is no measurement of an actual SIR in Sampath. Instead, as described above, a CRC is used to evaluate the frame error, and the Office Action cites to this in discussion of a first claim element of determining a quality of the received coding block. Although a full understanding of CRC is beyond the scope of the present discussion, Applicants respectfully note that CRC relates to determining the accuracy of the contents of transmitted frame and not the measured SIR of the transmitted frame. Although the actual SIR may contribute to the accuracy of the transmitted frame, there is no mathematical relationship other than a general statistical trends, with greater transmission SIR power levels naturally resulting in a greater likelihood of greater frame accuracy.

Referring to the Office Action at the second full paragraph of page 6, it is asserted that the Frame Error Rate (FER) can be measured from frames according to the target SIR. Applicants respectfully urge that this analysis is legally and technically wrong. Applicants have expressly recited measurement of an actual SIR in claim 1, and a

comparison between the actual and target SIRs. FER relates to an entirely different technical concepts (*i.e.*, the rate that incorrect bits are received in a transmitted frame). FER has nothing to do with transmitted power or interference rates used to determine SIR, and the Office Action is wrongly reading out express limitations in the claims. Moreover, FER cannot be used in a comparison with the target SIR since FER refers to a rate of accuracy and SIR refers to a ratio of transmitted power and interference levels.

Moreover, Sampath does not disclose or suggest "adjusting the target signal-to-interference ratio value based on values of the samples of the differences between the measured signal-to-interference ratio value and the target signal-to-interference ratio value, and the quality of the received coding block." As noted above, Sampath discloses adjusting the target SIR based on the quality of the received coding block. However this adjustment is, in no way, "based on values of the samples of the differences between the measured signal-to-interference ratio value and the target signal-to-interference ratio value." As described above, the adjustment to the target SIR in Sampath is based sole on the frame error, such that the target SIR is changed by either $K\Delta$ or $-\Delta$. Thus, the target SIR changes when frame error occurs, regardless of the difference between the measured and target SIRs.

Furthermore, the amount of the adjustment to the target SIR has not relationship to the measured samples. As described above, the Δ step value is fixed and has no relationship to the measured samples. Also, as described above, there are no measured samples in Sampath. Even if it could be assumed that the Δ step value may change (not

admitted, this change in the Δ step value has now relationship to the to the samples of the differences between the measured SIR and the target SIR. Instead, as described in Sampath in FIGS. 2-3 and the supporting text, the Δ step value is selected according to desired performance purpose, *i.e.,* to achieved the desired expected value and the standard deviation for the SIR. There is simply no teaching in Sampath of adjusting the target SIR based on values of the samples of the differences between the measured signal-to-interference ratio value and the target signal-to-interference ratio value.

For at least these reasons, Sampath fails to teach every recitation of claim 1, and the Office Action has not presented a correct rejection under 35 U.S.C. 102(b). Therefore, Applicants urge that claim 1 is currently in condition for allowance and all grounds for rejection have been overcome. Likewise, claims 2-14 depend from claim 1 and should be allowed on similar grounds. Withdrawal of this rejection of claims 1-14 and reconsideration of these claims in view of the preceding arguments are respectfully requested.

Similarly, independent claims 15 and 29, although different in scope from claim 1 and rejected on different grounds, also contains similar recitations related to storing samples of differences between target and measured SIRs and adjusting the target SIR based upon these samples. Thus, Sampath similarly fails to teach or suggest each and every limitation recited in claims 15 and 29, and for at least this reason, Applicants urge that the rejection of claims 15 and 29 in view of Sampath is clearly improper. Likewise, claims 16-28 depend, from claims 15 and should be allowed on similar grounds.

Withdrawal of this rejection of claims 15-29 and reconsideration of these claims in view of these arguments are respectfully requested.

Similarly, new independent claim 30, although different in scope from claims 1-29, also contains similar recitations related to storing samples of differences between target and measured SIRs and adjusting the target SIR based upon these samples. Thus, Sampath similarly fails to teach or suggest each and every limitation recited in claim 30 and, for at least this reason, Applicants urge that claim 30 is allowable over Sampath. Consideration and allowance of claim 30 in view of these arguments are respectfully requested.

Applicant further urge that dependent claims 2-14 and 16-28 should be separately allowable over Sampath because this reference does not disclose the limitations recited in these claims. Withdrawal of this rejection of claims 2-14 and 16-28 and reconsideration of these claims are therefore respectfully requested on these separate grounds.

Referring to claim 2, Applicants note, as described above, that Sampath discloses adjusting target SIR depending on CRC results from a previously received frame. There is no discussion in Sampath of altering the target SIR when decoding of the received coding block succeeds/does not succeed. Furthermore, as described above, Sampath does not disclose or suggest determining a difference between the measured and target SIRs. Moreover, Sampath there is certainly no discussion or suggestion of defining a threshold difference between the measured and target SIRs, and then adjusting the target SIR based

on the decoding of the received coding block or whether the difference exceeds the threshold.

For at least these reasons, Sampath fails to teach every recitation of claim 2, and the Office Action has not presented a correct rejection under 35 U.S.C. 102(b). Likewise, claims 3, 5-7, 9-10, 12-13, 16-17, 19-21, 23-24, and 26-27 should be allowed on similar grounds. Withdrawal of the rejection and reconsideration of these claims in view of the preceding arguments are respectfully requested.

Referring to claim 4, Sampath does not disclose adjusting the target SIR in relation to a local target SIR. Similarly, regarding claim 11, Sampath does not disclose adjusting the target SIR in relation to a global target SIR. Likewise, claims 8 and 14 should be allowed on similar grounds. Withdrawal of the rejection and reconsideration of claims 4, 8, 11, and 14 in view of the preceding arguments are respectfully requested.

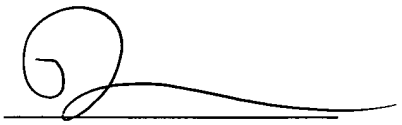
As discussed above, each of claims 1-30 recites subject matter which is neither disclosed nor suggested in the cited prior art. Applicants submit that the recited subject matter is more that sufficient to render the invention non-obvious to a person of ordinary skill in the art. It is respectfully requested that independent claims 1, 15, 29, and 30, and the related dependent claims be passed to issue in view of the above arguments comments and remarks.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by

telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Additional Claims Transmittal
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